

### REMARKS

Claims 13, 18 to 22 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over either one of Murakami et al. (U.S. 6,636,580) or Hertz et al. (U.S. 5,742, 655) in view of Ransohoff (U.S. 3,103, 479) in combination with Klepfer et al. (U.S. 3,141,830). Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over either one of Murakami et al. or Hertz et al. in view of Ransohoff in combination with Klepfer et al. as applied to claims 13, 18 to 22 and 25 above, and further in view of Bernard (U.S. 3, 467, 398).

Claims 13, 20 and 25 have been amended.

Reconsideration of the application based on the following remarks is respectfully requested.

#### Interview Summary

A telephone interview was conducted between William Gehris (Reg. No. 38,156) and Examiner Palabrica on March 3, 2008. No models were shown. Claims 13, 20 and 25 and the prior art reference Klepfer were discussed, as was an amendment to specify that the titanium base alloy of the top end plug of the present invention is welded to the upper extremity of the hafnium cladding. The examiner agreed that such a limitation would define over the present rejection using Klepfer but that a further search may be required. Applicants thank the Examiner for this agreement.

It was also noted that the representative for the case is now William Gehris (Reg. No. 38,156), and that a proper change of power of attorney will be filed in due course.

#### 35 U.S.C. 103(a) Rejections

Claims 13, 18 to 22 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over either one of Murakami et al. (U.S. 6,636,580) or Hertz et al. (U.S. 5,742, 655) in view of Ransohoff (U.S. 3,103, 479) in combination with Klepfer et al. (U.S. 3,141,830).

Murakami et al., Hertz et al. and Ransohoff disclose control rods.

Klepfer et al. discloses zirconium end caps or plugs 14, with porous compacts 26, 28, which may include titanium. See col. 4, lines 34 to 37 of Klepfer et al.

Claims 13, 20 and 25 have been amended to recite that titanium base alloy of the top end plug is welded to the upper extremity of the hafnium cladding. Support is found for example on page 11, line 25 et seq. and throughout the specification.

As noted above, Klepfer does not show a titanium base alloy of the top plug welded to the cladding and withdrawal of the rejections to claims 13, 20 and 25 as per the Interview agreement is respectfully requested.

With respect to independent claim 21, claim 21 recites “a cluster for adjustment of a pressurised water nuclear reactor, comprising:

a bundle of rods;

and a support of radiating shape called a spider to which the rods are fixed through top end plugs, wherein the spider is made of titanium-based alloy.”

It is respectfully submitted that none of the references show or disclose a spider made of titanium alloy, and it is respectfully submitted that the porous compact of titanium embedded in the end plug of Klepfer et al. would not have been used or disposed in a spider.

Withdrawal of the rejection of independent claims 13, 20, 21 and 25 under 35 U.S.C. §103(a) and dependent claims 18, 19, and 22 is respectfully requested

Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over either one of Murakami et al. or Hertz et al. in view of Ransohoff in combination with Klepfer et al. as applied to claims 13, 18 to 22 and 25 above, and further in view of Bernard (U.S. 3,467, 398).

In view of the above comments with respect to claim 13, withdrawal of the rejection of dependent claim 14 under 35 U.S.C. §103(a) is respectfully requested.

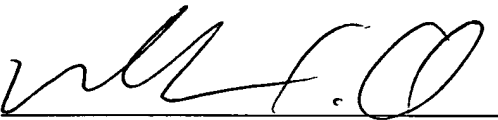
**CONCLUSION**

It is respectfully submitted that the application is in condition for allowance and applicants respectfully request such action.

If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

Respectfully submitted,

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